

PROJECT DESCRIPTION

THIS PROJECT INVOLVES MODIFYING THE LEFT TURN INDICATIONS TO EXCLUSIVE LEFT TURNS ON BOTH BOTH APPROACHES OF MD 197 LOCATED IN LAUREL, MARYLAND. EXISTING SIGNAL HEADS ARE TO BE UPGRADED TO LED MODULES. MD 197 IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION.

INTERSECTION OPERATION

THIS INTERSECTION CURRENTLY OPERATES AS AN 8-PHASE FULLY ACTUATED SIGNAL. LEFT TURN MOVEMENTS ON MD 197 SHALL BE MODIFIED TO EXCLUSIVE LEFTS.

CONTROLLER REQUIREMENTS

EXISTING NEMA SIZE 6 BASE MOUNTED CABINET SHALL BE UTILIZED. SHA SIGNAL SHOP TO PERFORM ALL INTERNAL CABINET WIRING.

GENERAL NOTES

1. THE CONTRACTOR SHALL REMOVE ALL UNUSED CABLES IN CONDUIT.
2. ALL EXISTING TRAFFIC SIGNAL EQUIPMENT REMOVED SHALL BECOME THE PROPERTY OF THE SIGNAL CONTRACTOR UPON COMPLETION OF THE SIGNAL WORK.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TERMINATING ALL SIGNAL. CABLE TO THE APPROPRIATE TERMINALS AND PROPERLY LABEL EACH CABLE.
4. ALL UNDERGROUND AND OVERHEAD UTILITIES SHOWN ON THESE PLANS ARE SCHEMATIC ONLY AND MAY NOT BE COMPLETE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING MISS UTILITY PRIOR TO CONSTRUCTION SO THAT ALL UTILITIES MAY BE LOCATED IN THE FIELD. IF THE CONTRACTOR PERCEIVES THAT A CONFLICT BETWEEN THE UTILITIES AND THE TRAFFIC SIGNAL WILL OCCUR, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER IMMEDIATELY SO THAT THE CONFLICT MAY BE RESOLVED.
5. THE CONTRACTOR SHALL CONTACT MR. ED RODENHIZER AT 410-787-7650 72 HOURS PRIOR TO CONSTRUCTION.
6. THE CONTRACTOR SHALL MAINTAIN THE CONTINUOUS OPERATION OF ALL INTERCONNECT, VEHICULAR, PEDESTRIAN DETECTORS, AND LIGHTING DEVICES. IF ANY DEVICE IS DAMAGED BY THE CONTRACTOR, IT SHALL BE REPAIRED WITHIN 72 HOURS BY THE CONTRACTOR AT NO COST TO THE ADMINISTRATION AFTER NOTIFICATION BY THE ENGINEER.
7. PUSHBUTTONS ARE TO BE LOCATED SO THAT THEY CAN BE ACTIVATED BY A PERSON IN A WHEELCHAIR FROM A 60" x 60" LEVEL LANDING AREA. A LEVEL LANDING AREA IS AN AREA WITH A CROSS SLOPE OF LESS THAN OR EQUAL TO 2%.
8. LOCATION OF ACCESSIBLE PEDESTRIAN SIGNAL PUSHBUTTONS MUST MEET LOCATION REQUIREMENTS OF MUTCD SEC. 4E.09 AND FIG. 4E.2 AND THE NCHRP PUBLICATION, ACCESSIBLE PEDESTRIAN SIGNALS: GUIDE TO BEST PRACTICE. IF NOT MET, THE CONTRACTOR IS TO STOP WORK ON PUSHBUTTON LOCATIONS UNTIL A DESIGN WAIVER IS OBTAINED, APPROVED BY THE DIRECTOR, OFFICE OF TRAFFIC AND SAFETY.
9. PUSHBUTTON IS TO BE LOCATED SO THAT A PEDESTRIAN IN A WHEELCHAIR LOCATED ON THE LEVEL LANDING AREA, DOES NOT HAVE TO REACH MORE THAN 18 IN.
10. LOCATION OF ACCESSIBLE PEDESTRIAN SIGNAL PUSHBUTTONS MUST MEET LOCATION REQUIREMENTS OF MUTCD SEC. 4E.09 AND FIG. 4E.2 AND THE NCHRP PUBLICATION, ACCESSIBLE PEDESTRIAN SIGNALS: GUIDE TO BEST PRACTICE. IF NOT MET, THE CONTRACTOR IS TO STOP WORK ON PUSHBUTTON LOCATIONS UNTIL A DESIGN WAIVER IS OBTAINED, APPROVED BY THE DIRECTOR, OFFICE OF TRAFFIC AND SAFETY.
11. PUSHBUTTON ARROWS ARE TO BE PARALLEL TO THE CROSSING FOR WHICH THEY ARE INTENDED.

PROJECT CONTACTS

MR. JOHN CONCANNON ASSISTANT DISTRICT ENGINEER - TRAFFIC 301-624-8140	MR. ROBERT SNYDER ASSISTANT DIVISION CHIEF, TRAFFIC OPERATIONS 410-787-7630
MR. RAY JOHNSON ASSISTANT DISTRICT ENGINEER - MAINTENANCE PHONE NUMBER	MR. ED RODENHIZER TEAM LEADER SIGNAL OPERATIONS 410-787-7650
MR. RICHARD DAFF SR. CHIEF, TRAFFIC OPERATIONS 410-787-7630	MR. EUGENE BAILEY TEAM LEADER SIGN OPERATIONS 410-787-7670
	MS. DARLENE EIDE SUPPLY OFFICER IV (SIGNAL SHOP WAREHOUSE) 410-787-7668

EQUIPMENT LIST

A. EQUIPMENT TO BE FURNISHED BY STATE HIGHWAY ADMINISTRATION

ITEM NO./ CAT CODE	QUANTITY	DESCRIPTION
9570	39 SF	SHEET ALUMINUM GROUND / POLE MOUNTED SIGN (1) 48 x 72 SHIELD ASSY POLE MOUNT (M3-3 15"x30" SOUTH) (M1-5 36"x48" MD SHIELD) (M6-1 24"x30" ARROW) (1) 30 x 51 SHIELD ASSY POLE MOUNT (M3-1 12"x24" NORTH) (M1-5 24"x30" MD SHIELD) (M6-1 15"x21" ARROW) (2) 9 x 15 R10-3(1) PUSH BUTTON TO CROSS "LAUREL-BOWIE RD" (2) 9 x 15 R10-3(1) PUSH BUTTON TO CROSS "MUIRKIRK RD"

PHASE CHART

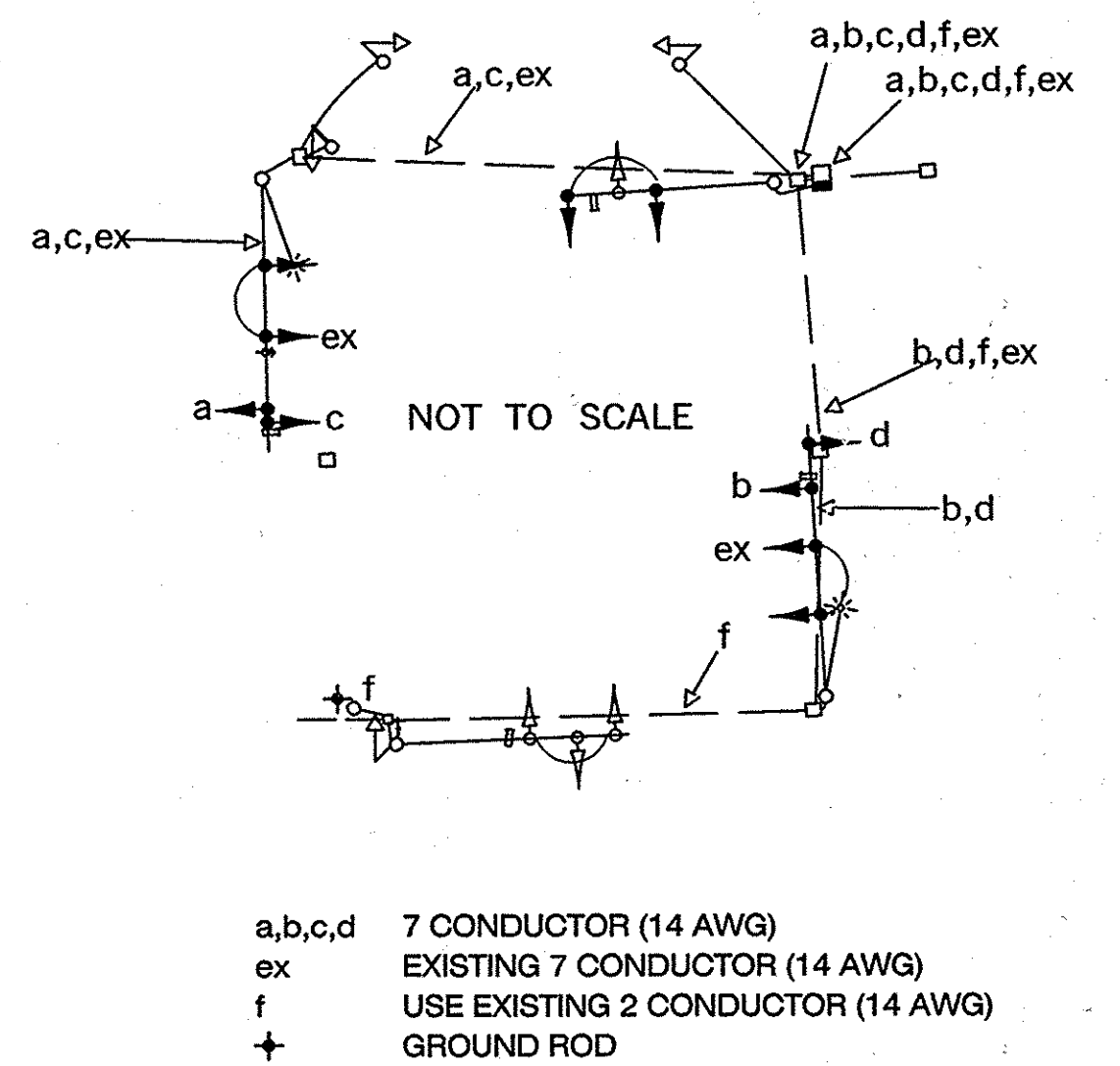
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
PHASE 1 & 5	←G←	←G←	R	R	←G←	←G←	R	R	R	R	←G←	R	R	R	DW	DW	DW	DW
1 & 5 CHANGE	TO PHASE 1 & 6, PHASE 2 & 5, OR PHASE 2 & 6														DW	DW	DW	DW
PHASE 1 & 6	←G←	←G←	G	G	←R←	←R←	R	R	R	R	←G←	R	R	R	DW	DW	DW	DW
1 & 6 CHANGE	←Y←	←Y←	G	G	←R←	←R←	R	R	R	R	←Y←	R	R	R	DW	DW	DW	DW
PHASE 2 & 5	←R←	←R←	R	R	←G←	←G←	G	G	R	R	←R←	R	R	R	WK	WK	DW	DW
2 & 5 CHANGE	←R←	←R←	R	R	←Y←	←Y←	G	G	R	R	←R←	R	R	R	DW	DW	DW	DW
PHASE 2 & 6	←R←	←R←	G	G	←R←	←R←	G	G	R	R	←R←	R	R	R	WK	WK	DW	DW
PED. CLEARANCE/ COUNTDOWN	←R←	←R←	G	G	←R←	←R←	G	G	R	R	←R←	R	R	R	FLDW	FLDW	DW	DW
2 & 6 CHANGE	←R←	←R←	Y	Y	←R←	←R←	Y	Y	R	R	←R←	R	R	R	DW	DW	DW	DW
PHASE 3	←R←	←R←	R	R	←R←	←R←	R	R	R	R	←G←	←G←	G	G	DW	DW	DW	DW
3 CHANGE	←R←	←R←	R	R	←R←	←R←	R	R	R	R	←R←	←R←	Y	Y	DW	DW	DW	DW
PHASE 4	←R←	←R←	R	R	←R←	←R←	R	R	←G←	←G←	G	G	R	R	DW	DW	DW	DW
4 CHANGE	←R←	←R←	R	R	←R←	←R←	R	R	Y	Y	Y	Y	R	R	DW	DW	DW	DW
PHASE 4 ALT.	←R←	←R←	R	R	←R←	←R←	R	R	←G←	←G←	G	G	R	R	DW	DW	DW	DW
PED. CLEARANCE/ COUNTDOWN	←R←	←R←	R	R	←R←	←R←	R	R	←G←	←G←	G	G	R	R	DW	DW	FLWK	FLWK
4 ALT. CHANGE	←R←	←R←	R	R	←R←	←R←	R	R	Y	Y	Y	Y	R	R	DW	DW	DW	DW
FLASHING OPERATION	FL/R	FL/R	FL/Y	FL/Y	FL/R	FL/R	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R	DARK	DARK	DARK	DARK

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY CONTRACTOR

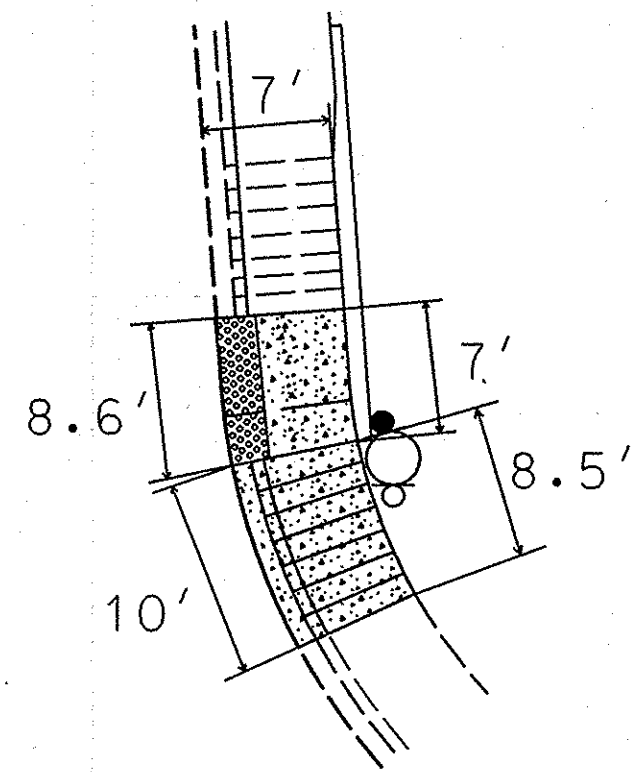
ITEM NO./ CAT CODE	QUANTITY	DESCRIPTION
1001	1 EA	MAINTENANCE OF TRAFFIC
2002	1 EA	TEST PIT EXCAVATION
6002	210 SF	4" CONCRETE SIDEWALK
8001	12 EA	12" R-Y-G LED SIGNAL HEAD
8011	1 EA	BREAKAWAY PEDESTAL POLE - ANY SIZE
8015	39 EA	LED MODULES - ANY SIZE
8017	1 EA	REMOVE AND DISPOSE OF EQUIPMENT
8026	5 LF	4" SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
8027	32 SF	DETECTABLE WARNING SURFACE
8028	20 SF	RELOCATE EXISTING SIGN
8030	1 CY	CONCRETE FOR SIGNAL FOUNDATION
8033	10 LF	NO. 6 AWG STRANDED BARE COPPER WIRE
8045	39 SF	INSTALL GROUND MOUNTED SIGN
8052	1 EA	GROUND ROD - 3/4 INCH DIAMETER x 10 FOOT
8061	420 LF	NO.14 AWG - 7 CONDUCTOR ELECTRICAL CABLE

C. MATERIALS TO BE RETURNED TO SHA
NONE

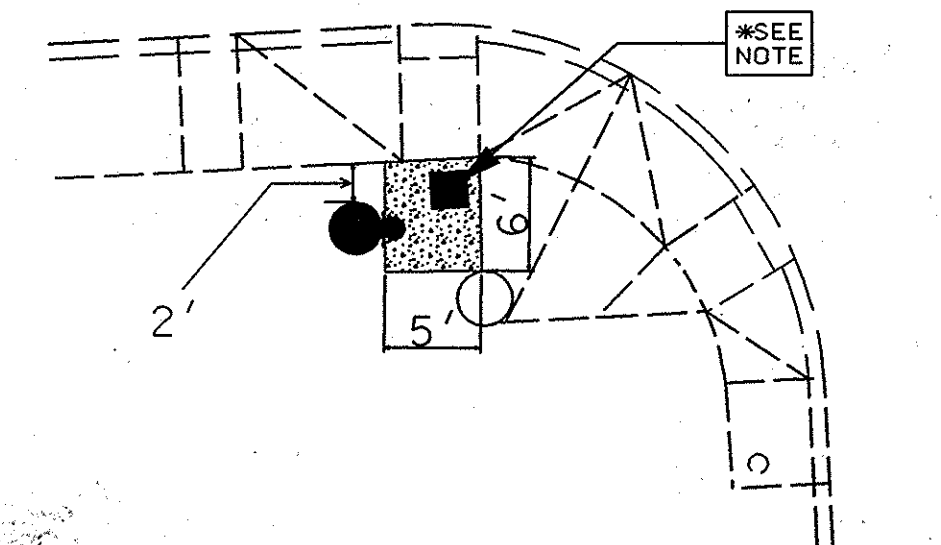
WIRING DIAGRAM



SIDEWALK RAMP DETAIL "P"



POLE / SIDEWALK RAMP DETAIL "J"



TOD NO:AT925-29
SHA NO:PG587A56/B56
MD 197@MUIRKIRK RD

SHA

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION

MD 197 (LAUREL-BOWIE RD) AT MUIRKIRK RD
LAUREL, MARYLAND

GENERAL INFORMATION SHEET

SCALE 1"= 20' DATE JULY 2007 CONTRACT NO. AT9255185

DESIGNED BY	E. RAUSER	COUNTY	PRINCE GEORGE'S
DRAWN BY	E. RAUSER	LOGMILE	16019712.28
CHECKED BY	J. BIDDLE	TIMS NO.	1132
FAP NO.		TOD NO.	

TS NO.TS-9021-G1 DRAWING OF SHEET NO. 2 OF 2